



Dart Aerospace Ltd.
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Hawkesbury, ON
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Canada

Tel (613) 632-5200

D119-646-241
Job Sheet 168906



Part No: D119-646-241

Job Qty: 1 ea

Part Name: AW119 Replacement Skidtube with Heavy Duty Wearplates - Fits LH or RH



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 11/24/17

Job Tracking No:

Due Date: 12/11/17

Created By: Mario Poulin

Type: SOLD

Description:

Note: DWG IIN-D119-646 REV D, D3887-045 REV E SHEETS 4, 6-11 IPP RevA: New issue DD verified by:EC IPP
REVB 12.11.05 (DEOD3887-B-1)(ecn 12-675) DD verf:JLM IPP REV:C 13.03.20 per chg003 ECN13-534 DD
verf:JLM IPP REV:D 17.05.19 as per dwg D3887 rev.e DD verf:JFS

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea		12/8/17	0.00	0.00	Start Up Skidtubes		<i>TH</i>
110	Skidtubes	1 pcs		12/8/17	0.77	0.05	Skidtubes		<i>TH</i>
120	HandFinish	1 pcs		12/8/17	0.00	0.79	HandFinish1		<i>2017/11/29 JSL</i>
121	QC	1 pcs		12/8/17	0.00	0.00	QC7		<i>BE</i>
122	QC	1 pcs		12/8/17	0.00	0.00	QC5		<i>BE</i>
130	Skidtubes	1 pcs		12/9/17	0.00	2.38	Skidtubes		<i>TH</i>
135	QC	1 pcs		12/9/17	0.00	0.00	QC5		<i>BE</i>
140	Skidtubes	1 pcs		12/9/17	0.00	2.38	Skidtubes		<i>TH</i>
150	QC	1 pcs		12/9/17	0.00	0.00	QC5		<i>BE</i>
160	Skidtubes	1 pcs		12/9/17	0.00	2.44	Skidtubes		<i>TH</i>
170	QC	1 pcs		12/9/17	0.00	0.00	QC5		<i>BE</i>
180	QC	1 pcs		12/9/17	0.00	0.00	QC10		<i>BE</i>
190	HandFinish	1 pcs		12/9/17	0.00	0.33	HandFinish2		<i>SA 18-3-12</i>
200	Powdercoat	1 pcs		12/9/17	0.00	0.20	Powdercoat1		<i>BR 18-3-15</i>
210	QC	1 pcs		12/9/17	0.00	0.00	QC3		<i>TH 18-3-15</i>
240	HandFinish	1 pcs		12/9/17	0.00	0.79	HandFinish4		<i>TH 18-3-15</i>
250	QC	1 pcs		12/9/17	0.00	0.00	QC5		<i>TH 18-3-22</i>
255	HandFinish	1 pcs		12/11/17	0.00	0.20	HandFinish3		<i>Not Required</i>
256	QC	1 pcs		12/11/17	0.00	0.00	QC5		<i>Not Required</i>
258	DC	1 pcs		12/11/17	0.00	0.00	DC		<i>Not Required</i>
260	Packaging	1 pcs		12/11/17	0.00	0.00	Packaging3		<i>TH</i>
270	QC21-FG	1 Ea		12/11/17	0.00	0.00	QC21		<i>TH 18/03/20</i>

Part Op 110 - 1- inspect Mat'L D2500-1-190 for damage 2-Cut tube to length as per dwg D3887 (154.8") 3- Ensure squareness of Descriptions: ends and scribe batch#

130 - 1- Install drill Jig DT9477 drill X-bolt spacer pilot holes using 3/16" drill first side only. 2- 2nd side, locating from first saddle holes use DT9861 A/B to drill 2nd side fwd saddle holes. 3- 2nd side locating from fwd saddle drill remaining crossbolt spacer holes using DT9477 4- Open crossbolt spacer holes to finished size as per dwg D3887 (section D-D and E-E) ***DO NOT OPEN FWD Saddles Holes*** 5- Deburr, blow out chips from inside of tube. 6- Bond web in place as per dwg D3887 & QSI 015, A/R Sikaflex-291 *4138654* Sikaflex expire date: *2018/04/21* Start: *Dec 9* Time: *2017* Finish: _____ Time: _____ (Adhere for 12 hours)*****

140 - 1- Bend FWD end of tube using bender 1 and bend prog. D3887.***Must use bending aid DT9544, ensure proper positioning*** 2- Cut FWD end of tube as per dwg D3887.***Verify measurement*** 3- Buff out marks left from bending 4- Drill FWD cap holes using DT8215. Open FWD & AFT cap holes to 0.208" 5- Open FWD saddle holes to finished size as per dwg D3887 6- Drill FWD x-bolt spacer holes using DT9816 and open to finished size.(verify measurement) 7- Drill

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**AW119 Replacement Skidtube with Heavy Duty Wearplates –
Fits LH or RH**

PART NO: D119-646-241

Revision:

Operation: Start up Operation

Change No:

Mfg Date: 11/29/17

Job No: 168906

Tow ring hole, using DT10047 locate from FWD saddle hole. (verify measurement). Open to finished size. 8- Drill 1.87" and 3.74 holes using DT10045 A&B locate from FWD saddle hole. (verify measurement) as per dwg. 9- C'sink FWD cap hole as per detail "C" 10- Countersink crossbolt spacer holes, and prepare tube for welding, deburr. 11- Deburr and blow out chips from inside of tube.

160 - NOTE: TACK IN 2 MOST FWD X-BOLT SPACERS AND TEST FIT FWD GROUND HANDLING FIXTURE, IF FIXTURE FITS WELL THEN PROCEED. FIXTURE DT10091. 1-Insert crossbolt spacers. Weld as per QSI 004 and Dwg D3887. Remember to back drill each hole before welding the other side. Use aluminum rod A/R Aluminum Rod M138723 2-Grind cross bolt welds flush as per Dwg D3887. Ensure no pin hole. 3-Counterbore x-bolt spacer holes as per Dwg D3887 using DT10279. 4-Deburr and blow out chips from inside of tube 5- Pick D2855-5 cap and transfer drill missing hole. Deburr and identify cap with skidtube batch#.

170 - TEST FIT USING FIXTURE DT10091.

200 - MASK AREA SHOWN ON SHEET 7, NOTE 9*** START TIME: 9:05 OVEN TEMPERATURE:

3580 FINISH TIME: 9:35 M138760. 240 - 1-Install wearplates as per Dwg D3887. 2-Inspect for foreign objects as per QSI 024 3-Install D2855-3 Cap and seal with Sikaflex. Clean excess adhesive. A/R Sikaflex-240/-291 M138723 Sikaflex expire date: 1810 4-Install insert in D2855- Cap. Install cap and seal with Sikaflex. Clean excess adhesive. A/R Sikaflex-240/-291 M138723 Sikaflex expire date: 1810

258 - Photocopy bluefile & type labels per PPP D119-646-241 CHG005

260 - Location : FG084

Job Allocations

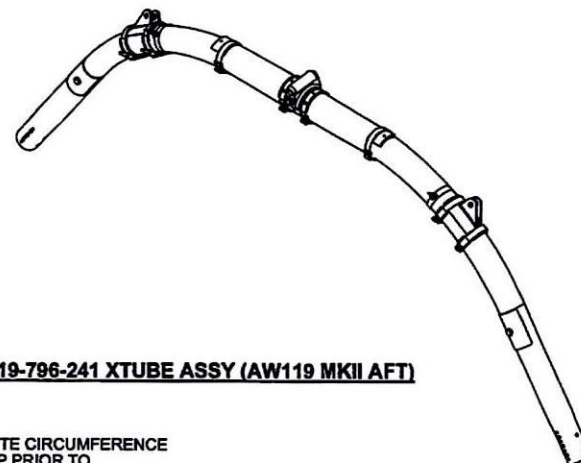
Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	D2500-1-190 <u>15971P</u>	1	51	0	0
140-Skidtubes	D2579 <u>5040524</u>	2	41	0	0
	D3885-1 <u>5-603713</u>	1	30	0	0
160-Skidtubes	D3681-1 <u>5019147</u>	12	111	0	0
	D3903-1 <u>5021093</u>	12	143	0	0
240-HandFinish	ALS4-1032-225 <u>5018875</u>	1	1,836	0	0
	AN3C46A <u>5041155</u>	8	223	0	0
	AN3C5A <u>5019396</u>	2	280	0	0
	D2855-3 <u>F153291</u>	1	28	0	0
	D2855-5 <u>5016939</u>	1	128	0	0
	* B3492-045 <u>5021249</u>	8	0	0	0
	D3672-1 <u>F150071</u>	2	1,741	0	0
	D3849-041 <u>5035667</u>	1	10	0	0
	✓ D3849-043 <u>5053121</u>	1	4	0	0
	D3904-1 <u>5046773</u>	16	143	0	0
	MS21043-3 <u>5016882</u>	8	647	0	0
	MS24694-C52 <u>F11137951</u>	2	170	0	0
	NAS1149C0332R <u>5044286</u>	2	3,227	0	0

Part Specifications

Specifications could not be found.

Plex 11/24/17 12:58 PM dart.poulin.mario

D119-796-241 XTUBE ASSY (AW119 MKII AFT)



NOTES:

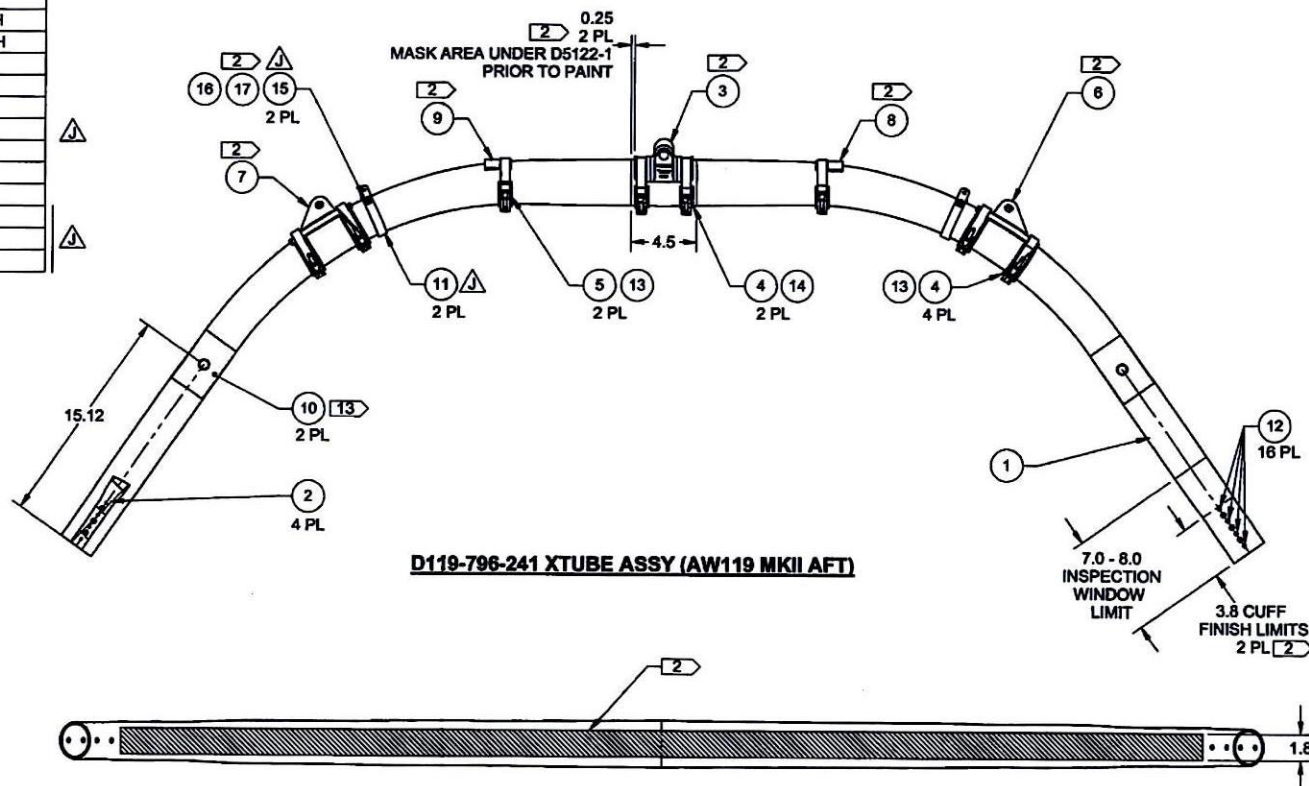
- 1) MATERIAL: N/A
- 2) FINISH: MASK D5134-041/-042 DAMPER SUPPORT ASSEMBLIES, CUFFS, D5136-1/-2 CONTACT PADS, THE COMPLETE CIRCUMFERENCE OF THE TUBE UNDER THE D5122-1 CENTER SUPPORT AND THE TAB ON THE D5515-1 GROUNDING CLAMP PRIOR TO APPLICATION OF CLEAR COAT/PAINT.
IF NECESSARY TOUCH UP PRIMER ON OUTSIDE OF CROSSTUBE PER DART QSI 005 4.2.
APPLY MATTE CLEAR COAT TO THE UNDERSIDE OF CROSSTUBE AS SHOWN (B4-2, HATCHED AREA) PER QSI 005 4.2.
MASK THE UNDERSIDE OF CROSSTUBE AS SHOWN (B4-2, HATCHED AREA).
PAINT OUTSIDE PER DART QSI 005 4.2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY USING PART NUMBER "D119-796-241" AND BATCH NUMBER ON INSIDE OF CUFF PER QSI 044 6.4
- 7) WEIGHT: 26.26 lbs
- 8) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE.
THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM DEFECTS SUCH AS SCRATCHES, NICKS OR DENTS. DEFECTS UP TO 0.005 MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 9) INSTALL D5122-1 CENTER SUPPORT HAND TIGHT ONLY. DO NOT TORQUE. INSTALL RED TAG TO INDICATE "D5122-1 CENTER SUPPORT MUST BE BONDED PER IIN-D119-796 PRIOR TO FLIGHT".
- 10) PRIOR TO FINISHING, ABRASE MATING SURFACES OF D5136-1/-2 AND SURFACE OF CROSSTUBE WITH SCOTCH BRITE 7447 RED AND REMOVE RESIDUE WITH DUPONT 4105S WASH 'N' WIPE DEGREASER. APPLY A 0.100" MIN THK LAYER OF PROSEAL 890 ON THE INSIDE CONCAVE SURFACE OF THE D5136-1/-2 CONTACT PADS AND INSTALL AT AN 8.4° OFFSET FROM THE CROSSTUBE BENDING PLANE. INSTALL MS21920-25 CLAMPS AND D5123-5 CLAMP CUSHIONS WHILE WET. PRIOR TO PACKAGING, RE-CHECK TORQUE ON CLAMPS AFTER PROSEAL 890 SEALANT HAS CURED FOR 72 HOURS.
- 11) TORQUE MS21920 CLAMPS 80 - 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY, THE NUT HAS NOT BOTTOMED-OUT AFTER TORQUING AND THE NUT IS FACING AFT.
- 12) PRIOR TO FINISHING, POSITION AND INSTALL D5134-041/-042 DAMPER SUPPORTS USING JIG DT10085. ABRASE MATING SURFACES OF THE D5134-041/-042 DAMPER SUPPORTS AND CROSSTUBE WITH SCOTCH BRITE 7447 RED AND REMOVE RESIDUE WITH DUPONT 4105S WASH 'N' WIPE DEGREASER. APPLY A 0.100" MIN THK LAYER OF PROSEAL 890 ON THE INSIDE CONCAVE SURFACE OF THE D5134-041/-042. INSTALL MS21920-25 CLAMPS AND D5123-1 CLAMP CUSHIONS WHILE WET. PRIOR TO PACKAGING, RE-CHECK TORQUE ON CLAMPS AFTER PROSEAL 890 SEALANT HAS CURED FOR 72 HOURS. ENSURE THAT THE MS21920 CLAMPS ARE POSITIONED AS SHOWN IN DETAIL C.
- 13) PRIOR TO FINISHING, ABRASE MATING SURFACES OF CROSSTUBE AND D5152-043 WITH SCOTCH BRITE 7447 RED AND REMOVE RESIDUE WITH DUPONT 4105S WASH 'N' WIPE DEGREASER. INSTALL D5152-043 WITH LAYER OF PROSEAL 890 ON INSIDE CONCAVE SURFACE, 0.100" MIN THK LOCATE D5152-043 USING TOOL DT10112.
- 14) INSTALL THE D5515-1 GROUNDING CLAMP AND ASSOCIATED HARDWARE PER DETAIL "C" PRIOR TO FINISHING. TORQUE THE MS21042-3 NUT 12-15 IN-LB. COMPLETELY SEAL THE EDGES OF THE CLAMP USING PROSEAL 890.
- 15) CARRY OUT A RESISTANCE CHECK BETWEEN THE D5515-1 GROUNDING CLAMP AND ANY UNPAINTED SECTION OF THE CROSSTUBE IN ACCORDANCE WITH AC43-13-1B CHAPTER 11. MAXIMUM RESISTANCE IS 3 MEGOHMS.

RELEASED
2017-05-04
ECN 17-538

J	ADD NOTE 14 & 15 ON SHT 1, ADD PAINT/PRIMER MASKING LOCATIONS, REVISE NOTES ON SHT 1 & 4, REVISE BOM ON SHT 2 TO ADD GROUNDING CLAMP AND ASSOCIATED HARDWARE. REF PAR 17-580	ML	17.02.10
I	D6023-106 MATERIAL REPLACES D6009-106, D5136-1/-2 & D5134-041/-042 NOW INSTALLED ON PRIMER.	AP	15.10.13
H	NOTE 9 RE-WITTEN. BONDING INSTRUCTIONS MOVED TO IIN. SEE PREVIOUS REV FOR DETAILS.	AP	15.07.02
G	FINISHING ORDER ADJUSTED, UPDATE BEND TOLERANCE AND TRN DETAIL TOLERANCE TO MATCH D119-796-141 DWG	AP	15.04.24
F	REMOVED PRIMER/PAINT ON CUFFS, 2.516 WAS 2.500 (C8-5)	AP	15.02.03
E	D5152-043 WAS D5150-3, SCOTCH BRITE 7447 RED WAS 180 GRIT SANDPAPER	DB	15.01.15
D	ADD D5150-3 STEP POST (2X), MOVED INSPECTION WINDOW DETAIL TO SHT 1, MODIFIED NOTES ON SH 1 & 3	DB	14.11.25
C	CR3212-4-07 RIVETS WAS CR3212-4-05 RIVETS, RADIUS BLOCK WAS NUT PLATE ASSEMBLY (BOM), REMOVED 7.5 DEG CUFF HOLE OFFSET (A1-3), REDUCED CUFF DIA TO 2.500 (C8-5), ADD INSPECTION WINDOW	AP	14.10.23
B	ORIENTATION OF D5122-1 CENTER SUPPORT WAS CORRECTED, D5123-5 ADDED UNDER D5136-1/-2 CONTACT PADS, ADDED D2873-043 NUT PLATE ASSY & CR3212-4-05 RIVETS, ADDED REFERENCE TO SKIDTUBES FOR LOCATING CUFF HOLES, RE-ORGANIZED NOTES, REMOVED REDUNDANT INFORMATION.	AP	14.09.08
A	NEW ISSUE	AP	14.08.07
REV.	DESCRIPTION	BY	DATE
DESIGN	AP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	ML		
CHECKED	JMH	DRAWING NO.	REV. J
MFG. APPR.	DP	D119-796-241	SHEET 1 OF 7
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	XTUBE ASSY (AW119 MKII AFT)	NTS
DATE	17.02.10	COPYRIGHT © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR FOR DISSEMINATION TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

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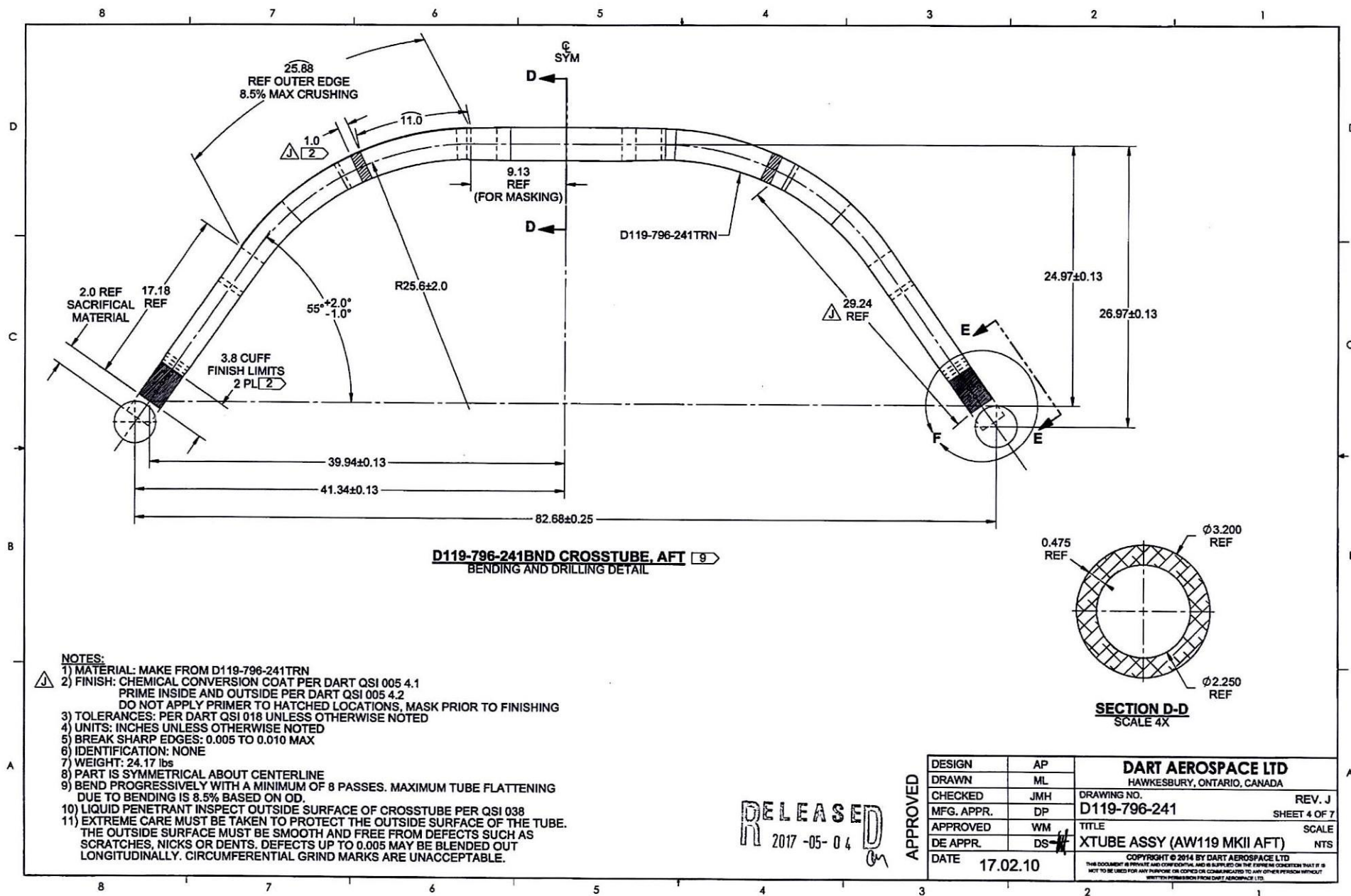
ITEM	QTY	P/N	DESCRIPTION
	X	D119-796-241	XTUBE ASSY (AW119 MKII AFT)
1	1	D119-796-241BND	CROSSTUBE, AFT
2	4	D2873-043	RADIUS BLOCK
3	1	D5122-1	CENTER SUPPORT
4	6	D5123-1	CLAMP CUSHION
5	2	D5123-5	CLAMP CUSHION
6	1	D5134-041	DAMPER SUPPORT ASSY, LH
7	1	D5134-042	DAMPER SUPPORT ASSY, RH
8	1	D5136-1	CONTACT PAD, LH
9	1	D5136-2	CONTACT PAD, RH
10	2	D5152-043	AFT POST MOUNT ASSY
11	2	D5515-1	GROUNDING CLAMP
12	16	CR3212-4-07	CSK RIVET, CHERRY MAX
13	6	MS21920-25	CLAMP
14	2	MS21920-28	CLAMP
15	2	MS27039-1-08	SCREW, PAN-HEAD
16	2	MS21042-3	NUT
17	4	NAS1149D0332J	WASHER

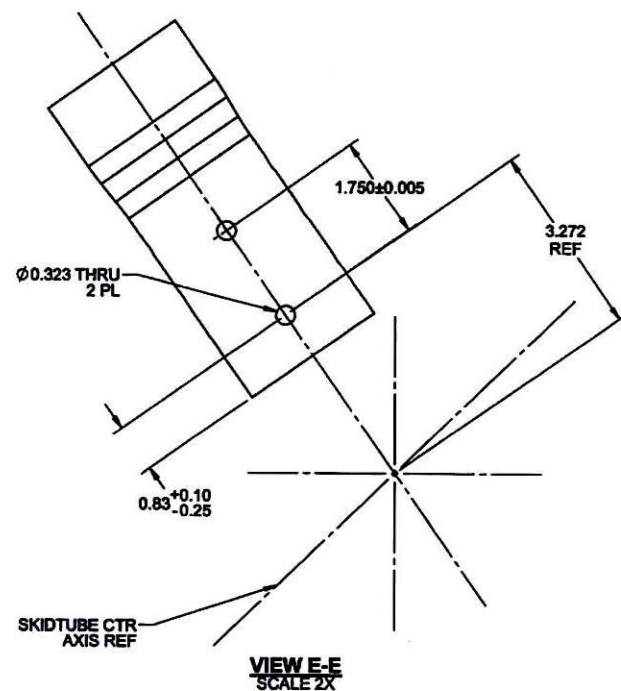
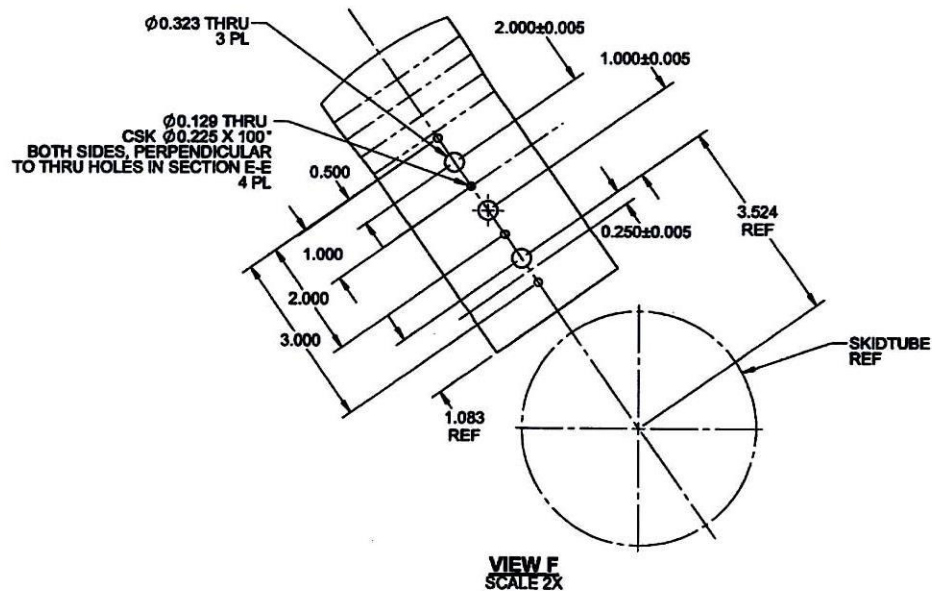


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